

Section 1. Registration Information

Source Identification

Facility Name:	Jumping Brook Water Treatment Plant
Parent Company #1 Name:	New Jersey American Water
Parent Company #2 Name:	American Water

Submission and Acceptance

Submission Type:	Re-submission
Subsequent RMP Submission Reason:	5-year update (40 CFR 68.190(b)(1))
Description:	USEPA & NJDEP RMP - JBTP
Receipt Date:	25-Aug-2022
Postmark Date:	25-Aug-2022
Next Due Date:	25-Aug-2027
Completeness Check Date:	25-Aug-2022
Complete RMP:	Yes
De-Registration / Closed Reason:	
De-Registration / Closed Reason Other Text:	
De-Registered / Closed Date:	
De-Registered / Closed Effective Date:	
Certification Received:	Yes

Facility Identification

EPA Facility Identifier:	1000 0006 3851
Other EPA Systems Facility ID:	110000544956
Facility Registry System ID:	

Dun and Bradstreet Numbers (DUNS)

Facility DUNS:	
Parent Company #1 DUNS:	184814317
Parent Company #2 DUNS:	

Facility Location Address

Street 1:	611 Old Corlies Avenue
Street 2:	
City:	Neptune
State:	NEW JERSEY
ZIP:	07753
ZIP4:	
County:	MONMOUTH

Facility Latitude and Longitude

Latitude (decimal):	40.203886
Longitude (decimal):	-074.065059
Lat/Long Method:	Interpolation - Satellite
Lat/Long Description:	Plant Entrance (General)
Horizontal Accuracy Measure:	3
Horizontal Reference Datum Name:	North American Datum of 1983
Source Map Scale Number:	

Owner or Operator

Operator Name:	New Jersey American Water
Operator Phone:	(732) 918-0971

Mailing Address

Operator Street 1:	611 Old Corlies Avenue
Operator Street 2:	
Operator City:	Neptune
Operator State:	NEW JERSEY
Operator ZIP:	07753
Operator ZIP4:	
Operator Foreign State or Province:	
Operator Foreign ZIP:	
Operator Foreign Country:	

Name and title of person or position responsible for Part 68 (RMP) Implementation

RMP Name of Person:	Lindsey Olson
RMP Title of Person or Position:	Sr. Manager Production
RMP E-mail Address:	

Emergency Contact

Emergency Contact Name:	Lindsey Olson
Emergency Contact Title:	Sr. Manager Production
Emergency Contact Phone:	(609) 226-0020
Emergency Contact 24-Hour Phone:	(732) 918-0971
Emergency Contact Ext. or PIN:	
Emergency Contact E-mail Address:	Lindsey.Olson@amwater.com

Other Points of Contact

Facility or Parent Company E-mail Address:	
Facility Public Contact Phone:	
Facility or Parent Company WWW Homepage Address:	

Local Emergency Planning Committee

LEPC:	Monmouth County LEPC
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Full Time Equivalent Employees

Number of Full Time Employees (FTE) on Site:	12
FTE Claimed as CBI:	

Covered By

OSHA PSM :	Yes
EPCRA 302 :	Yes
CAA Title V:	

Air Operating Permit ID:

OSHA Ranking

OSHA Star or Merit Ranking:

Last Safety Inspection

Last Safety Inspection (By an External Agency) Date:	14-Mar-2022
Last Safety Inspection Performed By an External Agency:	State environmental agency

Predictive Filing

Did this RMP involve predictive filing?:

Preparer Information

Preparer Name:	Pennonni Associates Inc
Preparer Phone:	(856) 547-0505
Preparer Street 1:	515 Grove Street, Suite 1B
Preparer Street 2:	
Preparer City:	Haddon Heights
Preparer State:	NEW JERSEY
Preparer ZIP:	08035
Preparer ZIP4:	
Preparer Foreign State:	
Preparer Foreign Country:	
Preparer Foreign ZIP:	

Confidential Business Information (CBI)

CBI Claimed:
Substantiation Provided:
Unsanitized RMP Provided:

Reportable Accidents

Reportable Accidents:	See Section 6. Accident History below to determine if there were any accidents reported for this RMP.
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Process Chemicals

Process ID:	1000126811
Description:	Water Treatment
Process Chemical ID:	1000158669
Program Level:	Program Level 3 process
Chemical Name:	Chlorine
CAS Number:	7782-50-5
Quantity (lbs):	30000
CBI Claimed:	
Flammable/Toxic:	Toxic

Process NAICS

Process ID:	1000126811
Process NAICS ID:	1000128185
Program Level:	Program Level 3 process
NAICS Code:	22131
NAICS Description:	Water Supply and Irrigation Systems

Section 2. Toxics: Worst Case

Toxic Worst ID: 1000102481

Percent Weight:	
Physical State:	Gas liquified by pressure
Model Used:	EPA's RMP*Comp(TM)
Release Duration (mins):	10
Wind Speed (m/sec):	1.5
Atmospheric Stability Class:	F
Topography:	Urban

Passive Mitigation Considered

Dikes:	
Enclosures:	Yes
Berms:	
Drains:	
Sumps:	
Other Type:	

Section 3. Toxics: Alternative Release

Toxic Alter ID: 1000108834

Percent Weight:	
Physical State:	Gas liquified by pressure
Model Used:	EPA's RMP*Comp(TM)
Wind Speed (m/sec):	3.0
Atmospheric Stability Class:	D
Topography:	Urban

Passive Mitigation Considered

Dikes:	
Enclosures:	Yes
Berms:	
Drains:	
Sumps:	
Other Type:	

Active Mitigation Considered

Sprinkler System:	
Deluge System:	
Water Curtain:	
Neutralization:	
Excess Flow Valve:	
Flares:	
Scrubbers:	
Emergency Shutdown:	
Other Type:	

Section 4. Flammables: Worst Case

No records found.

Section 5. Flammables: Alternative Release

No records found.

Section 6. Accident History

No records found.

Section 7. Program Level 3

Description

Jumping Brook Water Treatment Plant has a comprehensive prevention program which includes employee training, standard operating procedures, preventive maintenance, a scheduled hazard analysis, accident investigation procedures and emergency response. These measures are described in greater detail in the Executive Summary.

Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID:	1000137059
Chemical Name:	Chlorine
Flammable/Toxic:	Toxic
CAS Number:	7782-50-5
Process ID:	1000126811
Description:	Water Treatment
Prevention Program Level 3 ID:	1000109234
NAICS Code:	22131

Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):	15-Aug-2022
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Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):	12-May-2020
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The Technique Used

What If:	
Checklist:	
What If/Checklist:	Yes
HAZOP:	
Failure Mode and Effects Analysis:	
Fault Tree Analysis:	
Other Technique Used:	
PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):	

Major Hazards Identified

Toxic Release:	Yes
Fire:	Yes
Explosion:	
Runaway Reaction:	
Polymerization:	
Overpressurization:	Yes
Corrosion:	Yes
Overfilling:	
Contamination:	

Equipment Failure:	Yes
Loss of Cooling, Heating, Electricity, Instrument Air:	
Earthquake:	
Floods (Flood Plain):	
Tornado:	
Hurricanes:	
Other Major Hazard Identified:	

Process Controls in Use

Vents:	Yes
Relief Valves:	Yes
Check Valves:	Yes
Scrubbers:	Yes
Flares:	
Manual Shutoffs:	Yes
Automatic Shutoffs:	
Interlocks:	Yes
Alarms and Procedures:	Yes
Keyed Bypass:	
Emergency Air Supply:	
Emergency Power:	Yes
Backup Pump:	
Grounding Equipment:	
Inhibitor Addition:	
Rupture Disks:	Yes
Excess Flow Device:	
Quench System:	
Purge System:	
None:	
Other Process Control in Use:	

Mitigation Systems in Use

Sprinkler System:	
Dikes:	
Fire Walls:	
Blast Walls:	
Deluge System:	
Water Curtain:	
Enclosure:	Yes
Neutralization:	Yes
None:	
Other Mitigation System in Use:	Scrubber

Monitoring/Detection Systems in Use

Process Area Detectors:	Yes
Perimeter Monitors:	
None:	
Other Monitoring/Detection System in Use:	Personal monitors

Changes Since Last PHA Update

Reduction in Chemical Inventory:
Increase in Chemical Inventory:
Change Process Parameters:
Installation of Process Controls:
Installation of Process Detection Systems:
Installation of Perimeter Monitoring Systems:
Installation of Mitigation Systems:
None Recommended:
None: Yes
Other Changes Since Last PHA or PHA Update:

Review of Operating Procedures

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures): 21-Dec-2021

Training

Training Revision Date (The date of the most recent review or revision of training programs): 22-Aug-2017

The Type of Training Provided

Classroom: Yes
On the Job: Yes
Other Training:

The Type of Competency Testing Used

Written Tests: Yes
Oral Tests: Yes
Demonstration: Yes
Observation: Yes
Other Type of Competency Testing Used:

Maintenance

Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures): 22-Aug-2017

Equipment Inspection Date (The date of the most recent equipment inspection or test): 24-Aug-2022

Equipment Tested (Equipment most recently inspected or tested): Chlorine Evaporators

Management of Change

Change Management Date (The date of the most recent change that triggered management of change procedures): 24-Jun-2022

Change Management Revision Date (The date of the most recent review or revision of management of change procedures): 16-Aug-2022

Pre-Startup Review

Pre-Startup Review Date (The date of the most recent pre-startup review): 19-Oct-2016

Compliance Audits

Compliance Audit Date (The date of the most recent compliance audit): 15-Aug-2022

Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit): 31-Dec-2022

Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)): 30-Oct-2020

Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation): 30-Nov-2020

Employee Participation Plans

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans): 15-Aug-2022

Hot Work Permit Procedures

Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures): 15-Aug-2022

Contractor Safety Procedures

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures): 15-Aug-2022

Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance): 22-Jun-2022

Confidential Business Information

CBI Claimed:

Section 8. Program Level 2

No records found.

Section 9. Emergency Response

Written Emergency Response (ER) Plan

Community Plan (Is facility included in written community emergency response plan?): Yes

Facility Plan (Does facility have its own written emergency response plan?): Yes

Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?): Yes

Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?): Yes

Healthcare (Does facility's ER plan include information on emergency health care?): Yes

Emergency Response Review

Review Date (Date of most recent review or update of facility's ER plan): 22-Dec-2021

Emergency Response Training

Training Date (Date of most recent review or update of facility's employees): 22-Dec-2021

Local Agency

Agency Name (Name of local agency with which the facility ER plan or response activities are coordinated): Monmouth County LEPC

Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated): (732) 431-7400

Subject to

OSHA Regulations at 29 CFR 1910.38: Yes

OSHA Regulations at 29 CFR 1910.120: Yes

Clean Water Regulations at 40 CFR 112: Yes

RCRA Regulations at CFR 264, 265, and 279.52:

OPA 90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, or 30 CFR 254: Yes

State EPCRA Rules or Laws: Yes

Other (Specify): Toxic Catastrophe Prevention Act

Executive Summary

New Jersey American Water is New Jersey's largest private water utility, providing drinking water to over 300,000 people. During the treatment process New Jersey American Water uses chlorine gas from ton containers to help disinfect this water. In order to protect our neighbors from an accidental release of chlorine New Jersey American Water has a comprehensive written risk management program in place. This program addresses all aspects of process safety from operations to emergency response.

The program starts with employee training. A new employee must first meet the basic job requirements before they are even considered for a job handling hazardous chemicals. After an individual is accepted into a position they undergo 90 days of on-the-job and classroom training. During the entire training process, written and verbal tests are administered to highlight any deficiencies in the training progress. At the end of this training period a comprehensive verbal test is administered to evaluate the associate. All associates continually attend annual refresher training to maintain their skills and knowledge.

Standard operating procedures (SOPS) have been developed for all processes involving chlorine. These procedures are taken directly from manufacturer's equipment manuals or recognized industry standards. The SOPs describe the normal operation of the equipment, any abnormal conditions and the response to this type of condition in order to bring the equipment back into normal operating parameters. All employees are trained on the SOPs and review them annually.

A comprehensive preventive maintenance program exists in order to assure the proper operation of the equipment. Every piece of chlorine equipment is included in the PM program. Equipment is inspected and maintained on a schedule based on manufacturer's recommendations or industry standards. In the absence of any written recommendations all equipment is inspected on an annual basis. Employees responsible for maintenance are trained on procedures before they are allowed to perform any work on the equipment.

A hazard analysis is conducted every 5 years to determine if there are any realistic release scenarios for the site. This analysis evaluates every possible leak location and what protective measures are in place or could be implemented to prevent such a release. The hazard analysis is done with individuals who are familiar with the equipment and work with it on a daily basis under the guidance of the responsible manager. Recommendations are reviewed internally for implementation.

Any change in policy, procedures and equipment goes through an exhaustive review before implementation. This review ensures that all aspects of the change are studied and understood before any modification of the system is undertaken. Corrections are made to SOPs, drawings, and the emergency response program and training is provided before the change is implemented to ensure that all operations are done properly with the new equipment. A procedure is also in place to guarantee that there is always someone in charge of the RMP program in the event of supervisory changes.

In the rare event that despite the above procedures there is a leak or release of chlorine, employees are trained in emergency response actions. Individuals first go to 40 hours of training in emergency response and chemical hazards. This training includes instruction on the proper personal protective equipment and tools to stop a release. Employees then attend an 8-hr. refresher class ever year to keep their skills sharp. Drills are held annually in to insure that the emergency response program works as it is designed. The drills are evaluated and if corrective actions needed they are implemented. The plan is distributed to the local emergency planning committees (LEPC) and they are invited to attend the drills.

Accident investigation procedures have been developed to determine the root cause of any release and to correct the cause as quickly as possible. The accident investigation is conducted by the responsible manager who will follow-up on any corrective actions necessary.

The risk management program is formally audited annually to ensure that there are no deviations from all the policies and procedures involved in the handling of chlorine.

There have not been any chlorine releases at the facility during the previous five years that resulted in significant on-site or offsite consequences.

There are no current planned changes to further improve safety at the facility.